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SESSION RESUMED IN FILE 'BIOSIS, EMBASE, MEDLINE, CAPLUS'  
AT 14:53:12 ON 05 JAN 2006  
FILE 'BIOSIS' ENTERED AT 14:53:12 ON 05 JAN 2006  
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FILE 'MEDLINE' ENTERED AT 14:53:12 ON 05 JAN 2006  
FILE 'CAPLUS' ENTERED AT 14:53:12 ON 05 JAN 2006  
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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	43.09	62.47

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.75	-0.75

=> file biosis medline embase caplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	43.09	62.47

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.75	-0.75

FILE 'BIOSIS' ENTERED AT 14:53:24 ON 05 JAN 2006  
Copyright (c) 2006 The Thomson Corporation

FILE 'MEDLINE' ENTERED AT 14:53:24 ON 05 JAN 2006

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FILE 'CAPLUS' ENTERED AT 14:53:24 ON 05 JAN 2006  
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COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> polyhistidine (3a) nitrilotriacetic  
L8 0 POLYHISTIDINE (3A) NITRILOTRIACETIC

=> polyhistidine (10a) nitrilotriacetic  
L9 8 POLYHISTIDINE (10A) NITRILOTRIACETIC

=> 19 and heparin  
L10 0 L9 AND HEPARIN

=> 19 and chromatography  
L11 4 L9 AND CHROMATOGRAPHY

=> dup rem 19

PROCESSING COMPLETED FOR L9  
L12 5 DUP REM L9 (3 DUPLICATES REMOVED)

=> d ibib abs total

L12 ANSWER 1 OF 5 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
DUPLICATE 1

ACCESSION NUMBER: 2005:40833 BIOSIS  
DOCUMENT NUMBER: PREV200500039412  
TITLE: A simple method for the production of recombinant proteins  
from mammalian cells.  
AUTHOR(S): Wu, Chia-Hung; Balasubramanian, Wesley Roy; Ko, Ya-Ping;  
Hsu, George; Chang, Shih-En; Prijovich, Zeljko M.; Chen,  
Kai-Chuan; Roffler, Steve R. [Reprint Author]  
CORPORATE SOURCE: Inst Biomed SciSect 2, Acad Sinica, Yen Geo Yuan Rd,  
Taipei, 128, Taiwan  
sroff@lbms.sinica.edu.tw  
SOURCE: Biotechnology and Applied Biochemistry, (October 2004) Vol.  
40, No. Part 2, pp. 167-172. print.  
CODEN: BABIEC. ISSN: 0885-4513.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 19 Jan 2005  
Last Updated on STN: 19 Jan 2005

AB Expression of recombinant proteins in mammalian cells is useful for  
obtaining products with normal posttranslational modifications. We  
describe a simple and economical method for the production of milligram  
levels of proteins in murine fibroblasts. Retroviral or lipofectAMINE(TM)  
(Gibco Laboratories) transduction was employed to generate stable  
murine-fibroblast producer cells. Confluent cultures of stable fibroblast  
clones were maintained for up to 1 month in 0.5% serum. Culture medium  
was collected every 2-3 days and **polyhistidine**-tagged proteins  
were purified by ammonium sulphate precipitation and Ni<sup>2+</sup>-  
**nitrilotriacetic** acid affinity chromatography. Highly pure,  
active, glycosylated recombinant proteins, including human  
beta-glucuronidase, mouse beta-glucuronidase, aminopeptidase N (CD13) and  
a single-chain antibody-enzyme fusion protein, were obtained with yields  
of 3-6 mg/l of culture medium. Fc-tagged proteins were also produced and  
purified in a single step by Protein A affinity chromatography with yields  
of 6-12 mg/l. The techniques described here allow simple and economical  
production of recombinant mammalian proteins with post-translational  
modifications.

L12 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:248160 CAPLUS  
DOCUMENT NUMBER: 140:25067  
TITLE: Reversible immobilization of peptides: Surface  
modification and in situ detection by attenuated total  
reflection FTIR spectroscopy  
AUTHOR(S): Rigler, Per; Ulrich, Wolf-Peter; Hoffmann, Patrik;  
Mayer, Michael; Vogel, Horst  
CORPORATE SOURCE: Institute of Biomolecular Science, Swiss Federal  
Institute of Technology Lausanne, Ecublens, 1015,  
Switz.  
SOURCE: ChemPhysChem (2003), 4(3), 268-275  
CODEN: CPCHFT; ISSN: 1439-4235  
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB A generic method is described for the reversible immobilization of  
polyhistidine-bearing polypeptides and proteins on attenuated total  
reflecting (ATR) sensor surfaces for the detection of biomol. interactions  
by FTIR spectroscopy. Nitrilotriacetic acid (NTA) groups are covalently  
attached to self-assembled monolayers of either thioalkanes on gold films  
or mercaptosilanes on silicon dioxide films deposited on germanium

internal reflection elements. Complex formation between Ni<sup>2+</sup> ions and NTA groups activates the ATR sensor surface for the selective binding of polyhistidine sequences. This approach not only allows a stable and reversible immobilization of histidine-tagged peptides (His-peptides) but also simultaneously allows the direct in situ quantification of surface-adsorbed mols. from their specific FTIR spectral bands. The surface concns. of both NTA and His-peptide on silanized surfaces were determined to be 1.1 and 0.4 mols. nm<sup>-2</sup>, resp., which means that the surface is densely covered. A comparison of exptl. FTIR spectra with simulated spectra reveals a surface-enhancement effect of one order of magnitude for the gold surfaces. With the presented sensor surfaces, new ways are opened up to investigate, in situ and with high sensitivity and reproducibility, protein-ligand, protein-protein, protein-DNA interactions, and DNA hybridization by ATR-FTIR spectroscopy.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:416331 CAPLUS

DOCUMENT NUMBER: 131:195841

TITLE: Compartmentation of cyclic adenosine 3',5'-monophosphate signaling in caveolae

AUTHOR(S): Schwencke, Carsten; Yamamoto, Manabu; Okumura, Satoshi; Toya, Yoshiyuki; Kim, Song-Jung; Ishikawa, Yoshihiro

CORPORATE SOURCE: Cardiovascular & Pulmonary Research Institute, Allegheny University of the Health Sciences, Pittsburgh, PA, 15212, USA

SOURCE: Molecular Endocrinology (1999), 13(7), 1061-1070  
CODEN: MOENEN; ISSN: 0888-8809

PUBLISHER: Endocrine Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The cAMP-signaling pathway is composed of multiple components ranging from receptors, G proteins, and adenylyl cyclase to protein kinase A. A common view of the mol. interaction between them is that these mols. are disseminated on the plasma lipid membrane and random collide with each other to transmit signals. A limitation to this idea, however, is that a signaling cascade involving multiple components may not occur rapidly. Caveolae and their principal component, caveolin, have been implicated in transmembrane signaling, particularly in G protein-coupled signaling. We examined whether caveolin interacts with adenylyl cyclase, the membrane-bound enzyme that catalyzes the conversion of ATP to cAMP. When overexpressed in insect cells, types III, IV, and V adenylyl cyclase were localized in caveolin-enriched membrane fractions. Caveolin was coimmunopptd. with adenylyl cyclase in tissue homogenates and copurified with a **polyhistidine**-tagged form of adenylyl cyclase by Ni-**nitriilotriacetic** acid resin chromatog. in insect cells, suggesting the colocalization of adenylyl cyclase and caveolin in the same microdomain. Further, the regulatory subunit of protein kinase A (RII $\alpha$ , but not RI $\alpha$ ) was also enriched in the same fraction as caveolin. Gs $\alpha$  was found in both caveolin-enriched and non-caveolin-enriched membrane fractions. Our data suggest that the cAMP-signaling cascade occurs within a restricted microdomain of the plasma membrane in a highly organized manner.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 5 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
DUPLICATE 2

ACCESSION NUMBER: 1995:26227 BIOSIS

DOCUMENT NUMBER: PREV199598040527

TITLE: Single-step purification of *Proteus mirabilis* urease accessory protein ureE, a protein with a naturally occurring histidine tail, by nickel chelate affinity

chromatography.  
AUTHOR(S): Sriwanthana, Busarawan; Island, Michael D.; Maneval, David;  
Mobley, Harry L. T. [Reprint author]  
CORPORATE SOURCE: Div. Infectious Diseases, Dep. Med., Univ. Md. Sch. Med.,  
10 S. Pine St., Baltimore, MD 21201, USA  
SOURCE: Journal of Bacteriology, (1994) Vol. 176, No. 22, pp.  
6836-6841.  
CODEN: JOBAAY. ISSN: 0021-9193.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 11 Jan 1995  
Last Updated on STN: 23 Feb 1995

AB Proteus mirabilis urease, a nickel metalloenzyme, is essential for the virulence of this species in the urinary tract. Escherichia coli containing cloned structural genes ureA, ureB, and ureC and accessory genes ureD, ureE, ureF, and ureG displays urease activity when cultured in M9 minimal medium. To study the involvement of one of these accessory genes in the synthesis of active urease, deletion mutations were constructed. Cultures of a ureE deletion mutant did not produce an active urease in minimal medium. Urease activity, however, was partially restored by the addition of 5  $\mu$ M NiCl<sub>2</sub> to the medium. The predicted amino acid sequence of UreE, which concludes with seven histidine residues among the last eight C-terminal residues (His-His-His-His-Asp-His-His-His), suggested that UreE may act as a Ni<sup>2+</sup> chelator for the urease operon. To exploit this potential metal-binding motif, we attempted to purify UreE from cytoplasmic extracts of E. coli containing cloned urease genes. Soluble protein was loaded onto a nickel-nitrilotriacetic acid column, a metal chelate resin with high affinity for polyhistidine tails, and bound protein was eluted with a 0 to 0.5 M imidazole gradient. A single polypeptide of 20-kDa apparent molecular size, as shown by sodium dodecyl sulfate-10 to 20% polyacrylamide gel electrophoresis, was eluted between 0.25 and 0.4 M imidazole. The N-terminal 10 amino acids of the eluted polypeptide exactly matched the deduced amino acid sequence of P. mirabilis UreE. The molecular size of the native protein was estimated on a Superdex 75 column to be 36 kDa, suggesting that the protein is a dimer. These data suggest that UreE is a Ni<sup>2+</sup>-binding protein that is necessary for synthesis of a catalytically active urease at low Ni<sup>2+</sup> concentrations.

L12 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1305455 CAPLUS  
TITLE: Selective Labeling of Extracellular Proteins  
Containing Polyhistidine Sequences by a  
Fluorescein-Nitrilotriacetic Acid Conjugate  
AUTHOR(S): Goldsmith, Christian R.; Jaworski, Jacek; Sheng,  
Morgan; Lippard, Stephen J.  
CORPORATE SOURCE: Department of Chemistry, Picower Center for Learning  
and Memory, Howard Hughes Medical Institute,  
Massachusetts Institute of Technology, Cambridge, MA,  
02139, USA  
SOURCE: Journal of the American Chemical Society ACS ASAP  
CODEN: JACSAT; ISSN: 0002-7863  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The compound NTA-DCF consists of two components, a dichlorofluorescein (DCF) reporter and a nitrilotriacetic acid (NTA) functionality. The latter binds polyhistidine sequences selectively through a bridging metal ion. The NTA-DCF conjugate has photophys. properties similar to those of the parent DCF fluorophore both by itself and as its nickel(II) complex. The insensitivity of the emission to paramagnetic ions allows the probe to label His6-tagged proteins fluorescently on the extracellular surfaces of HEK 293-T and HeLa cells.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 13:48:04 ON 05 JAN 2006)

FILE 'STNGUIDE' ENTERED AT 13:48:09 ON 05 JAN 2006

FILE 'HOME' ENTERED AT 13:48:14 ON 05 JAN 2006

FILE 'BIOSIS, EMBASE, MEDLINE, CAPLUS' ENTERED AT 13:48:26 ON 05 JAN 2006

FILE 'BIOSIS, EMBASE, MEDLINE, CAPLUS' ENTERED AT 14:01:59 ON 05 JAN 2006

L1 8958 INSULIN (3A) (CARP OR ADIPOCYTE)  
L2 6974 INSULIN (2A) (CARP OR ADIPOCYTE)  
L3 0 INSULIN (2A) (CARP) (2A) ADYPOCYTE  
L4 0 INSULIN (3A) (CARP) (3A) ADYPOCYTE  
L5 157 INSULIN (3A) (CARP)  
L6 6 L5 AND ADIPOCYTE  
L7 3 DUP REM L6 (3 DUPLICATES REMOVED)

FILE 'BIOSIS, MEDLINE, EMBASE, CAPLUS' ENTERED AT 14:53:24 ON 05 JAN 2006

L8 0 POLYHISTIDINE (3A) NITRILOTRIACETIC  
L9 8 POLYHISTIDINE (10A) NITRILOTRIACETIC  
L10 0 L9 AND HEPARIN  
L11 4 L9 AND CHROMATOGRAPHY  
L12 5 DUP REM L9 (3 DUPLICATES REMOVED)

=> polyhistidine and (nitrilotriacetic or nta)

L13 170 POLYHISTIDINE AND (NITRILOTRIACETIC OR NTA)

=> l13 and heparin

L14 2 L13 AND HEPARIN

=> dup rem l14

PROCESSING COMPLETED FOR L14

L15 2 DUP REM L14 (0 DUPLICATES REMOVED)

=> d ibib abs total

L15 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1095740 CAPLUS

DOCUMENT NUMBER: 143:380864

TITLE: Cloning and large-scale purification of recombinant restriction endonuclease EcoP15I for use in analysis of gene expression

INVENTOR(S): Krueger, Detlev H.; Moencke-Buchner, Elisabeth;

Mackeldanz, Petra; Reuter, Monika

PATENT ASSIGNEE(S): Charite-Universitaetsmedizin Berlin, Germany

SOURCE: Eur. Pat. Appl., 26 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1584677	A1	20051012	EP 2004-90136	20040407
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
PRIORITY APPLN. INFO.:			EP 2004-90136	20040407

AB The present invention relates to a recombinant DNA which encodes a storable EcoP15I type III restriction endonuclease as well as large-scale purification of EcoP15I to near homogeneity and the use of said EcoP15I as tool

for serial anal. of gene expression and/or the identification of corresponding genes. More specifically, construction of the EcoP15I overexpression plasmid pQEP15 is described. The large-scale purification of affinity tag (i.e. 6xHis)-containing EcoP15I is also reported. EcoP15I can be used in a determination of CAG repeats in the Huntington's disease genes.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:999617 CAPLUS

DOCUMENT NUMBER: 141:408342

TITLE: Integrated method for capture and purification of tagged proteins

INVENTOR(S): Bettencourt, Jeffrey David; Boisvert, David C.

PATENT ASSIGNEE(S): Bayer Pharmaceuticals Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 14 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004229330	A1	20041118	US 2004-789246	20040227
PRIORITY APPLN. INFO.:			US 2003-451093P	P 20030227
			US 2003-502923P	P 20030915

AB The present invention provides a method for high efficiency capture and purification of a tagged protein from a protein preparation, especially a tagged protein of low quantity. The method comprises a first concentration step, concentrating a target tagged protein by a neg. charged capture support; and a second purification step, purifying the tagged protein by a tag-specific affinity support. The method is especially useful for capturing and purifying tagged protein of low quantity. The present invention also provides a kit for the capture and purification of the tagged protein.

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(FILE 'HOME' ENTERED AT 13:48:04 ON 05 JAN 2006)

FILE 'STNGUIDE' ENTERED AT 13:48:09 ON 05 JAN 2006

FILE 'HOME' ENTERED AT 13:48:14 ON 05 JAN 2006

FILE 'BIOSIS, EMBASE, MEDLINE, CAPLUS' ENTERED AT 13:48:26 ON 05 JAN 2006

FILE 'BIOSIS, EMBASE, MEDLINE, CAPLUS' ENTERED AT 14:01:59 ON 05 JAN 2006

L1 8958 INSULIN (3A) (CARP OR ADIPOCYTE)  
 L2 6974 INSULIN (2A) (CARP OR ADIPOCYTE)  
 L3 0 INSULIN (2A) (CARP) (2A) ADYPOCITE  
 L4 0 INSULIN (3A) (CARP) (3A) ADYPOCITE  
 L5 157 INSULIN (3A) (CARP)  
 L6 6 L5 AND ADIPOCYTE  
 L7 3 DUP REM L6 (3 DUPLICATES REMOVED)

FILE 'BIOSIS, MEDLINE, EMBASE, CAPLUS' ENTERED AT 14:53:24 ON 05 JAN 2006

L8 0 POLYHISTIDINE (3A) NITRILOTRIACETIC  
 L9 8 POLYHISTIDINE (10A) NITRILOTRIACETIC  
 L10 0 L9 AND HEPARIN  
 L11 4 L9 AND CHROMATOGRAPHY  
 L12 5 DUP REM L9 (3 DUPLICATES REMOVED)  
 L13 170 POLYHISTIDINE AND (NITRILOTRIACETIC OR NTA)

L14 2 L13 AND HEPARIN  
L15 2 DUP REM L14 (0 DUPLICATES REMOVED)

=> l12 and (chromatography or chromatographic)  
L16 2 L12 AND (CHROMATOGRAPHY OR CHROMATOGRAPHIC)

=> d ibib abs total

L16 ANSWER 1 OF 2 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
ACCESSION NUMBER: 2005:40833 BIOSIS  
DOCUMENT NUMBER: PREV200500039412  
TITLE: A simple method for the production of recombinant proteins  
from mammalian cells.  
AUTHOR(S): Wu, Chia-Hung; Balasubramanian, Wesley Roy; Ko, Ya-Ping;  
Hsu, George; Chang, Shih-En; Prijovich, Zeljko M.; Chen,  
Kai-Chuan; Roffler, Steve R. [Reprint Author]  
CORPORATE SOURCE: Inst Biomed SciSect 2, Acad Sinica, Yen Geo Yuan Rd,  
Taipei, 128, Taiwan  
sroff@lbms.sinica.edu.tw  
SOURCE: Biotechnology and Applied Biochemistry, (October 2004) Vol.  
40, No. Part 2, pp. 167-172. print.  
CODEN: BABIEC. ISSN: 0885-4513.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 19 Jan 2005  
Last Updated on STN: 19 Jan 2005

AB Expression of recombinant proteins in mammalian cells is useful for  
obtaining products with normal posttranslational modifications. We  
describe a simple and economical method for the production of milligram  
levels of proteins in murine fibroblasts. Retroviral or lipofectAMINE(TM)  
(Gibco Laboratories) transduction was employed to generate stable  
murine-fibroblast producer cells. Confluent cultures of stable fibroblast  
clones were maintained for up to 1 month in 0.5% serum. Culture medium  
was collected every 2-3 days and **polyhistidine**-tagged proteins  
were purified by ammonium sulphate precipitation and Ni<sup>2+</sup>-  
**nitritoltriacetic acid** affinity **chromatography**. Highly  
pure, active, glycosylated recombinant proteins, including human  
beta-glucuronidase, mouse beta-glucuronidase, aminopeptidase N (CD13) and  
a single-chain antibody-enzyme fusion protein, were obtained with yields  
of 3-6 mg/l of culture medium. Fc-tagged proteins were also produced and  
purified in a single step by Protein A affinity **chromatography**  
with yields of 6-12 mg/l. The techniques described here allow simple and  
economical production of recombinant mammalian proteins with  
post-translational modifications.

L16 ANSWER 2 OF 2 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN  
ACCESSION NUMBER: 1995:26227 BIOSIS  
DOCUMENT NUMBER: PREV199598040527  
TITLE: Single-step purification of Proteus mirabilis urease  
accessory protein ureE, a protein with a naturally  
occurring histidine tail, by nickel chelate affinity  
**chromatography**.  
AUTHOR(S): Sriwanthana, Busarawan; Island, Michael D.; Maneval, David;  
Mobley, Harry L. T. [Reprint author]  
CORPORATE SOURCE: Div. Infectious Diseases, Dep. Med., Univ. Md. Sch. Med.,  
10 S. Pine St., Baltimore, MD 21201, USA  
SOURCE: Journal of Bacteriology, (1994) Vol. 176, No. 22, pp.  
6836-6841.  
CODEN: JOBAAY. ISSN: 0021-9193.  
DOCUMENT TYPE: Article  
LANGUAGE: English  
ENTRY DATE: Entered STN: 11 Jan 1995  
Last Updated on STN: 23 Feb 1995

AB Proteus mirabilis urease, a nickel metalloenzyme, is essential for the  
virulence of this species in the urinary tract. Escherichia coli

containing cloned structural genes ureA, ureB, and ureC and accessory genes ureD, ureE, ureF, and ureG displays urease activity when cultured in M9 minimal medium. To study the involvement of one of these accessory genes in the synthesis of active urease, deletion mutations were constructed. Cultures of a ureE deletion mutant did not produce an active urease in minimal medium. Urease activity, however, was partially restored by the addition of 5  $\mu$ M NiCl<sub>2</sub> to the medium. The predicted amino acid sequence of UreE, which concludes with seven histidine residues among the last eight C-terminal residues (His-His-His-His-Asp-His-His-His), suggested that UreE may act as a Ni-2+ chelator for the urease operon. To exploit this potential metal-binding motif, we attempted to purify UreE from cytoplasmic extracts of E. coli containing cloned urease genes. Soluble protein was loaded onto a nickel-nitrilotriacetic acid column, a metal chelate resin with high affinity for polyhistidine tails, and bound protein was eluted with a 0 to 0.5 M imidazole gradient. A single polypeptide of 20-kDa apparent molecular size, as shown by sodium dodecyl sulfate-10 to 20% polyacrylamide gel electrophoresis, was eluted between 0.25 and 0.4 M imidazole. The N-terminal 10 amino acids of the eluted polypeptide exactly matched the deduced amino acid sequence of P. mirabilis UreE. The molecular size of the native protein was estimated on a Superdex 75 column to be 36 kDa, suggesting that the protein is a dimer. These data suggest that UreE is a Ni-2+-binding protein that is necessary for synthesis of a catalytically active urease at low Ni-2+ concentrations.

=> d his

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FILE 'STNGUIDE' ENTERED AT 13:48:09 ON 05 JAN 2006

FILE 'HOME' ENTERED AT 13:48:14 ON 05 JAN 2006

FILE 'BIOSIS, EMBASE, MEDLINE, CAPLUS' ENTERED AT 13:48:26 ON 05 JAN 2006

FILE 'BIOSIS, EMBASE, MEDLINE, CAPLUS' ENTERED AT 14:01:59 ON 05 JAN 2006

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L1      8958 INSULIN (3A) (CARP OR ADIPOCYTE)
L2      6974 INSULIN (2A) (CARP OR ADIPOCYTE)
L3      0 INSULIN (2A) (CARP) (2A) ADYPOCITE
L4      0 INSULIN (3A) (CARP) (3A) ADYPOCITE
L5      157 INSULIN (3A) (CARP)
L6      6 L5 AND ADIPOCYTE
L7      3 DUP REM L6 (3 DUPLICATES REMOVED)
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FILE 'BIOSIS, MEDLINE, EMBASE, CAPLUS' ENTERED AT 14:53:24 ON 05 JAN 2006

```
L8      0 POLYHISTIDINE (3A) NITRILOTRIACETIC
L9      8 POLYHISTIDINE (10A) NITRILOTRIACETIC
L10     0 L9 AND HEPARIN
L11     4 L9 AND CHROMATOGRAPHY
L12     5 DUP REM L9 (3 DUPLICATES REMOVED)
L13     170 POLYHISTIDINE AND (NITRILOTRIACETIC OR NTA)
L14     2 L13 AND HEPARIN
L15     2 DUP REM L14 (0 DUPLICATES REMOVED)
L16     2 L12 AND (CHROMATOGRAPHY OR CHROMATOGRAPHIC)
```

=> l13 and (negative or negatively or ion)

```
L17     58 L13 AND (NEGATIVE OR NEGATIVELY OR ION)
```

=> dup rem l17

PROCESSING COMPLETED FOR L17

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L18     42 DUP REM L17 (16 DUPLICATES REMOVED)
```

=> l13 and (heparin or dextran or chondroitin or polyuronic or hyaluronic or dermatan or alginic or carboxymethylcellulose)



L19 5 L13 AND (HEPARIN OR DEXTRAN OR CHONDROITIN OR POLYURONIC OR  
HYALURONIC OR DERMATAN OR ALGINIC OR CARBOXYMETHYLCELLULOSE)

=> dup rem l19

PROCESSING COMPLETED FOR L19

L20 5 DUP REM L19 (0 DUPLICATES REMOVED)

=> d ibib abs total

L20 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1242959 CAPLUS

DOCUMENT NUMBER: 143:474588

TITLE: Purification and recovery of recombinant silk proteins  
using magnetic affinity separation

INVENTOR(S): Hoffmann, Christian; Keller, Karsten

PATENT ASSIGNEE(S): E.I. Dupont De Nemours and Company, USA

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005111068	A2	20051124	WO 2005-US14315	20050426
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

US 2005261479 A1 20051124 US 2005-110424 20050420

PRIORITY APPLN. INFO.: US 2004-566558P P 20040429

AB A method for the purification of recombinant silk proteins from a sample using magnetic affinity separation is described. The recombinant silk protein is expressed with an affinity tag which has a high binding affinity for an affinity ligand immobilized on magnetic particles. In the method, the processes of clarification of the crude silk protein extract, concentration of the product and purification of the product are combined in a single step involving the affinity capture of the spider silk protein onto the magnetic particles directly from the extract. The product yields are improved due to the reduced number of steps in the purification process. The invention is useful because silk proteins have utility in producing high strength fibers for textile applications and composite materials, such as parachutes, sails and body armor; in medical applications, such as wound sutures, wound dressings, membranes, surfaces for cultivated cells, and as a scaffold for artificial organs; and as film-forming agents in personal care products, such as skin and hair care products. The purpose of this Example was to demonstrate the recovery and purification of spider silk analog protein DP-2A using ferrite magnetic particles. The spider silk analog protein DP-2A was expressed in E. coli and was recovered and purified using magnetic affinity separation. The purpose of this Example was to demonstrate the recovery and purification of spider silk analog protein DP-2A using polyvinyl alc. (PVA) coated magnetic particles.

L20 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1095740 CAPLUS  
 DOCUMENT NUMBER: 143:380864  
 TITLE: Cloning and large-scale purification of recombinant restriction endonuclease EcoP15I for use in analysis of gene expression  
 INVENTOR(S): Krueger, Detlev H.; Moencke-Buchner, Elisabeth; Mackeldanz, Petra; Reuter, Monika  
 PATENT ASSIGNEE(S): Charite-Universitaetsmedizin Berlin, Germany  
 SOURCE: Eur. Pat. Appl., 26 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1584677	A1	20051012	EP 2004-90136	20040407
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
PRIORITY APPLN. INFO.:			EP 2004-90136	20040407

AB The present invention relates to a recombinant DNA which encodes a storable EcoP15I type III restriction endonuclease as well as large-scale purification of EcoP15I to near homogeneity and the use of said EcoP15I as tool for serial anal. of gene expression and/or the identification of corresponding genes. More specifically, construction of the EcoP15I overexpression plasmid pQEP15 is described. The large-scale purification of affinity tag (i.e. 6xHis)-containing EcoP15I is also reported. EcoP15I can be used in a determination of CAG repeats in the Huntington's disease genes.  
 REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:999617 CAPLUS  
 DOCUMENT NUMBER: 141:408342  
 TITLE: Integrated method for capture and purification of tagged proteins  
 INVENTOR(S): Bettencourt, Jeffrey David; Boisvert, David C.  
 PATENT ASSIGNEE(S): Bayer Pharmaceuticals Corporation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 14 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004229330	A1	20041118	US 2004-789246	20040227
PRIORITY APPLN. INFO.:			US 2003-451093P	P 20030227
			US 2003-502923P	P 20030915

AB The present invention provides a method for high efficiency capture and purification of a tagged protein from a protein preparation, especially a tagged protein of low quantity. The method comprises a first concentration step, concentrating a target tagged protein by a neg. charged capture support; and a second purification step, purifying the tagged protein by a tag-specific affinity support. The method is especially useful for capturing and purifying tagged protein of low quantity. The present invention also provides a kit for the capture and purification of the tagged protein.

L20 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:269843 CAPLUS  
 DOCUMENT NUMBER: 140:289230

TITLE: Fabric care compositions containing UV protectant, dye sequestrant, fabric softener etc

INVENTOR(S): Adair, Matha J.; Finn, Leslie S.; Petrin, Michael J.; Rodriguez, Cheryl H.; Shanks, Philip C.; Van Buskirk, Gregory; De Leo, Malcolm A.; Selbach, Hanneliese S.; Ochomogo, Maria G.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 30 pp.  
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004063597	A1	20040401	US 2002-259179	20020927
WO 2004038084	A2	20040506	WO 2003-US30521	20030925
WO 2004038084	A3	20040715		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR

PRIORITY APPLN. INFO.: US 2002-259179 A 20020927

AB A non-liquid, liquid, liquid-gel or gelled fabric care composition comprises one or

more fabric care enzymes effective for aiding in preventing pilling fuzzing, staining and other deterioration of fabric fibers during the wash process. The fabric care composition also comprises one or more UV protectants for brightening and preventing light caused photo fading or other damage to fabrics. The fabric care composition comprises one or more surface active dispersing, emulsifying and/or solubilizing agent principally comprised of surfactants, co-surfactants, hydrotropes and solvents selected to solubilize or stabilize the composition The fabric care composition also

comprises

one or more dye-transfer inhibitors, anti-redeposition agents or dye sequestrants to prevent re-deposition of dyes which have become transient from other fabrics. The fabric care composition comprises one or more dye, pigment and fabric color fixative or finish protectant to lock-in dyes and pigments to prevent their loss in quantity or quality during soaking or washing. The fabric care composition optionally comprises one or more textile lubricant and/or textile softening agent to coat the textiles and reduce inter-fiber and fiber surface friction. The fabric care composition also comprises one or more hardness and metal ion sequestrants and crystal growth inhibitors to bind free ions to prevent formation of insol. precipitate compds. The fabric care composition also comprises one or more chlorine and/or active oxygen scavengers or neutralizers which act to neutralize oxidizing agents, i.e., those species with oxidation potential. The fabric care

composition

optionally comprises one or more from the following: handling, storage, processing agents to modify elastic and viscous phase properties, anti-foaming or frothing agents, anti-microbial, anti-bacterial or anti-fungal agents, pH buffer, adjustment and/or modification, as needed, aesthetic dyes and/or fragrances.

L20 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:173877 CAPLUS

DOCUMENT NUMBER: 138:203650

TITLE: Methods for screening antibody-producing cells on heterogeneous antigen substrates

INVENTOR(S): Kessler, Steven

PATENT ASSIGNEE(S) : USA  
 SOURCE: PCT Int. Appl., 65 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003019137	A2	20030306	WO 2002-US26529	20020821
WO 2003019137	A3	20031127		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2001-314070P P 20010822

AB The author discloses methods and compds. that relate to screening and selection of monoclonal antibodies specific for antigens in heterogeneous antigen mixts. Antibody-secreting cells, such as hybridomas, are modified to make them capable of capturing their secreted antibody onto their surface membranes in appropriate binding d. and orientation. Selectivity of binding to novel or desired antigens is achieved by first reacting the antigen mixts. affixed to a solid substrate with a polyclonal antibody library that prevents access to the majority of antigens or epitopes other than those that are novel or desired.

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(FILE 'HOME' ENTERED AT 13:48:04 ON 05 JAN 2006)

FILE 'STNGUIDE' ENTERED AT 13:48:09 ON 05 JAN 2006

FILE 'HOME' ENTERED AT 13:48:14 ON 05 JAN 2006

FILE 'BIOSIS, EMBASE, MEDLINE, CAPLUS' ENTERED AT 13:48:26 ON 05 JAN 2006

FILE 'BIOSIS, EMBASE, MEDLINE, CAPLUS' ENTERED AT 14:01:59 ON 05 JAN 2006

L1 8958 INSULIN (3A) (CARP OR ADIPOCYTE)  
 L2 6974 INSULIN (2A) (CARP OR ADIPOCYTE)  
 L3 0 INSULIN (2A) (CARP) (2A) ADYPOCITE  
 L4 0 INSULIN (3A) (CARP) (3A) ADYPOCITE  
 L5 157 INSULIN (3A) (CARP)  
 L6 6 L5 AND ADIPOCYTE  
 L7 3 DUP REM L6 (3 DUPLICATES REMOVED)

FILE 'BIOSIS, MEDLINE, EMBASE, CAPLUS' ENTERED AT 14:53:24 ON 05 JAN 2006

L8 0 POLYHISTIDINE (3A) NITRILOTRIACETIC  
 L9 8 POLYHISTIDINE (10A) NITRILOTRIACETIC  
 L10 0 L9 AND HEPARIN  
 L11 4 L9 AND CHROMATOGRAPHY  
 L12 5 DUP REM L9 (3 DUPLICATES REMOVED)  
 L13 170 POLYHISTIDINE AND (NITRILOTRIACETIC OR NTA)  
 L14 2 L13 AND HEPARIN  
 L15 2 DUP REM L14 (0 DUPLICATES REMOVED)  
 L16 2 L12 AND (CHROMATOGRAPHY OR CHROMATOGRAPHIC)  
 L17 58 L13 AND (NEGATIVE OR NEGATIVELY OR ION)  
 L18 42 DUP REM L17 (16 DUPLICATES REMOVED)

L19 5 L13 AND (HEPARIN OR DEXTRAN OR CHONDROITIN OR POLYURONIC OR HYA  
L20 5 DUP REM L19 (0 DUPLICATES REMOVED)

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

89.14

151.61

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-7.50

-8.25

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 14:59:50 ON 05 JAN 2006